

Book Review

Christopher S. Butler & Francisco González-García. 2014. *Exploring functional-cognitive space*. Amsterdam: John Benjamins. pp. 579, ISBN 9789027259226

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For better or worse, linguistics is an academic discipline that is characterized by theoretical pluralism (see Feyerabend 1975). The field consists of many co-existing approaches that address different empirical phenomena, use different methods of analysis and make different theoretical assumptions, so that they are only comparable to a limited extent. This bewildering variety has led to efforts of systematization and ordering. There are handbooks such as Heine and Narrog (2009), in which a number of approaches are presented in a series of chapters; and there are monographs such as Fischer's (2007) comparison of formal and functional approaches to morphosyntactic change, in which different theories are directly juxtaposed with regard to a certain subject matter. *Exploring functional-cognitive space*, written by Christopher S. Butler and Francisco González-García, inscribes itself in the same enterprise as those two volumes, but it represents a new and altogether original way of engaging in meta-theoretical analysis, for two reasons. First, the book does not contrast approaches that are presented as “antagonistic” or “rival” theories of language, such as for instance generative grammar vs. usage-based linguistics. Rather, it focuses on a set of approaches that could be described as a “family” of theories: the book addresses frameworks that can be grouped together under the headings of functional, cognitive and constructionist approaches. As in any real family, there are little tensions, disagreements and even the occasional absence of communication. Yet, the similarities between the family members are immediately apparent. The second distinguishing feature of the book is that the comparison that the authors present is based on a large-scale empirical investigation. Whereas earlier comparisons of linguistic theories have been exclusively qualitative, that is, based on an author's reading of the respective strands of work, the discussion in *Exploring functional-cognitive space* relies on quantitative analyses of questionnaire responses that were obtained from researchers working in the approaches that are being compared. These quantitative results are complemented by qualitative observations that Butler and González-García draw from their readings of the relevant literature. Because of its focus on closely related approaches and the reliance on an empirical methodology, *Exploring functional-cognitive space* sets itself distinctly apart from previous comparisons of

linguistic frameworks. For example, works such as Harris' (1993) account of how generative semantics broke away from the Chomskyan mainstream, Newmeyer's (1998) juxtaposition of formal and functional linguistics, or Evans' (2014) recent critique of innatist views of grammar draw their primary appeal from a narrative of controversy: these books tell stories about competing theories – and, importantly, about the researchers involved in those theories. *Exploring functional-cognitive space*, by contrast, tries to come to terms with linguistic theories that complement each other. Its primary aim is to give its readers a thorough orientation in the fields of functional, cognitive and constructional research: what ideas can be considered central to the entire field? where are areas of overlap? what are the respective idiosyncrasies of the approaches under analysis? The following paragraphs will outline how Butler and González-García tackle these questions and take the reader on a guided tour through the landscape of functional-cognitive linguistics.

Exploring functional-cognitive space is organized into twelve chapters. The first chapter introduces the aims of the book and situates it in the context of previous work. Chapter 2 offers an initial presentation of the 16 frameworks that form the basis for the comparison. These include Functional Discourse Grammar, Role and Reference Grammar, Systemic Functional Linguistics, the work of Talmy Givón, Interactional Linguistics, Word Grammar, the Columbia School, Cognitive Grammar, different brands of Construction Grammar, the Lexical Constructional Model and the Parallel Architecture.

Chapter 3 presents the questionnaire that was sent out to representative members of the 16 approaches. Butler and González-García contacted a total of 30 researchers, and many of the respective approaches are represented by at least two respondents. The questionnaire consists of 58 statements, as for example “Interpersonal phenomena such as speech acts are given detailed treatment” or “Data from different stages in the history of languages are used”. The respondents were asked to state how much these statements were in alignment with their own approach. Answers were given on a four-point scale, ranging from “completely true and central” to “not true”. In addition, the respondents could elaborate on their ratings with free comments. The questionnaire statements reflect six groups of features that Butler and González-García view as particularly important. The first group is concerned with the communicative function of language, for instance, the assumption that communicative function shapes linguistic forms. The second group probes the range of phenomena that a given approach intends to cover – not all approaches that are selected aim to present a full model of language, including grammar, lexis and discourse. The third feature group contains statements about the types of data that inform the respective approaches, asking for instance about the use of

spoken data or historical data. The fourth group is meant to capture the kinds of explanation that are invoked in the respective approaches. This feature group is exemplified by statements such as “Iconicity is regarded as a major source of functional motivation”. The fifth group addresses theoretical characteristics of the models of grammar that are proposed, including issues such as the assumption of empty categories or the distinction between semantics and pragmatics. Finally, the sixth feature group contains statements about applications of the respective approaches to fields such as language pedagogy, stylistics or translation.

Chapter 4 gives the reader a general description of the quantitative methods that were used for the analysis of the questionnaire data. Three statistical techniques are employed. First, correlation measures can establish degrees of pairwise similarity between the approaches that are compared. Second, multi-dimensional scaling (MDS) is used to visualize the entire set of approaches in a map-like fashion. The approaches are shown as points on maps where relative similarity between approaches corresponds to geometrical proximity. This technique thus literally transforms the field of functional-cognitive linguistic research into a two-dimensional landscape. The third technique is hierarchical clustering, which allows Butler and González-García to identify groups and subgroups in the set of approaches that they analyze.

Chapters 5 to 10 take the reader through the empirical results. Each of these chapters focuses on one of the six feature groups of the questionnaire: communicative function, coverage, data, explanations, theoretical characteristics and applications, respectively. Chapter 11 presents an integrated statistical analysis of all the results. Wrapping up the book, Chapter 12 summarizes the main similarities and differences that were uncovered by the analysis and offers a few pointers for future research. The chapters of the book are complemented by separate indexes for languages, names and technical terms.

The crucial question that this review should answer is of course the following: given Butler and González-García’s choice of questionnaire items and their statistical analysis, what can the reader learn about functional and cognitive linguistics? The discussion in Chapter 11, which presents an overview based on the complete dataset, is a useful starting point for an answer to that question. In a first analytical step, the authors run correlation statistics to determine degrees of mutual similarity between the 16 approaches under analysis. The correlation statistics allow them to identify “loners” and “packs”. Systemic Functional Linguistics, Word Grammar and the Columbia School instantiate the former. On the other end of the spectrum, the family of construction grammars

(Cognitive Grammar, Cognitive Construction Grammar, Radical Construction Grammar, etc.) show great overlap in their respective features, which is indeed to be expected. Another result is that there are sets such as the pair of Functional Discourse Grammar and Role and Reference Grammar, which are highly similar to each other but not to any of the other models. The second analytical section of Chapter 11 offers a multi-dimensional scaling analysis of the questionnaire data. Butler and González-García first present a two-dimensional solution that arranges the approaches as a cloud in a coordinate system with a *x*-axis and a *y*-axis. Conveniently, this type of presentation allows the reader to identify whether a given approach is rather central or rather peripheral to the functional-cognitive landscape. Also, it is immediately apparent which approaches are the closest neighbors and which approaches are situated at opposite ends of the spectrum. What an MDS analysis does not automatically reveal is which features account for the respective placements on the map. The authors thus offer a qualitative interpretation of the arrangement, suggesting that the first dimension of the plot situates the approaches on a continuum from “radically functionalist” (exemplified by Systemic Functional Linguistics, Word Grammar and Emergent Grammar) to “closer to formalism” (Functional Discourse Grammar, Role and Reference Grammar, Sign-Based Construction Grammar). The second dimension of the MDS map is not easily interpretable in terms of a single feature, but issues that play a role include the attention to cognitive matters and discourse, the use of typological data and the distinction of semantic and pragmatic meanings. The third part of the analysis in Chapter 11 uses hierarchical clustering to identify groups and subgroups in the set of functional approaches. Here, the 16 approaches are arranged in a tree diagram in which the branches group together “schools” of approaches. In alignment with the earlier results, Systemic Functional Linguistics is classified as a school of its own, Word Grammar, the Columbia School and Sign-Based Construction Grammar are merged into larger schools, but occupy a peripheral position in those schools. A tightly integrated school of approaches consists of Cognitive Construction Grammar, Embodied Construction Grammar, the Lexical Constructional Model and Frame-Semantic Construction Grammar. Butler and González-García note that the three analytical procedures yield compatible and complementing results that serve well as a broad orientation within the field of functional-cognitive linguistics.

Coming to an evaluation, *Exploring functional-cognitive space* is an impressive piece of work that essentially invents a new genre of meta-theoretical analysis: a set of mutually related approaches is compared against a grid of assumptions and practices, which is operationalized in terms of questionnaire responses by researchers who are working members of the respective approaches. It goes without saying that the success of this procedure largely depends on the analysts’

ability to pick out those assumptions and practices that really matter to the field and that at the same time show enough variation between the approaches that enter the analysis. In my view, Butler and González-García have come up with a very fitting selection of questionnaire items, so that the results of the quantitative analyses offer new insights, not only to students who would like a first orientation but also to seasoned professionals, most of whom – let's be honest – would still have a few blind spots on their mental map of functional linguistics. Due to its special design, *Exploring functional-cognitive space* has a certain surplus value over established formats like handbooks or pairwise comparisons of theories. It makes explicit which assumptions and practices characterize the approaches under analysis, but by the same token, it also reveals the absence of certain features within a given approach. To give just one example, the analysis of typological data is central to Role and Reference Grammar, whereas researchers in Cognitive Construction Grammar rarely take cross-linguistic data into account (see Hilpert and Östman 2014 for a recent commentary on that issue). The analysis in *Exploring functional-cognitive space* thus points to certain underdeveloped areas in the respective approaches, and this of course is a very useful impulse for future research.

Weighing in at almost 600 pages, *Exploring functional-cognitive space* is a hefty volume and, if I had to formulate a criticism, it would be that the book could have been more concise. A companion website could have usefully accommodated some of the information that is now on paper, including a large number of data tables that represent parts of the questionnaire responses. As an added bonus, such a website might actually host a live version of the questionnaire, which interested readers might fill out in order to discover their own place on the map of functional linguistics. This suggestion, however, does not take anything away from the qualities that characterize *Exploring functional-cognitive space*. It is an excellent, tremendously useful piece of work that is sure to promote a fruitful dialogue between researchers of different functionalist frameworks.

References

- Evans, Vyvyan. 2014. *The language myth: Why language is not an instinct*. Cambridge: Cambridge University Press.
- Feyerabend, Paul. 1975. *Against method: Outline of an anarchist theory of knowledge*. New York: Verso.
- Fischer, Olga. 2007. *Morphosyntactic change: Functional and formal perspectives*. Oxford: Oxford University Press.
- Harris, Randy Allen. 1993. *The linguistics wars*. Oxford: Oxford University Press

- Heine, Bernd & Heiko Narrog (eds.). 2009. *The Oxford handbook of linguistic analysis*. Oxford: Oxford University Press.
- Hilpert, Martin & Jan-Ola Östman. 2014. Introduction: Reflections on constructions across grammars. *Constructions and Frames* 6(2). 137–142.
- Newmeyer, Frederick. 1998. *Language form and language function*. Cambridge, MA: MIT Press.